

**REMARKS**

Claims 1-4 are pending. By this Amendment, Claims 1-2 are amended. Support for the amendment to Claim 1 is at least provided in the written disclosure of the present invention on page 13, lines 5-11 and page 16, line 23 through page 17, line 2. Support for the amendment to Claim 2 is at least provided on page 10, lines 3-8.

Applicant respectfully submits no new material is presented herein.

**Claims Rejected—35 U.S.C. § 112**

Claims 1-4 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. By this amendment, Claim 1 is amended responsive to the rejection. As explained above, support for the amendment to Claim 1 is at least provided on page 13, lines 5-11 and page 16, line 23 through page 17, line 2. Consequently, Applicant respectfully submits that Claim 1 is in compliance with 35 U.S.C. § 112 and, as such, respectfully requests withdrawal of the rejection.

**Claims Rejected—35 U.S.C. § 103**

Claims 1-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,452,164 to Cole et al. ("Cole") in view of U.S. Patent No. 5,687,045 to Okai et al. ("Okai"). Applicant respectfully traverses the rejection.

Cole teaches a thin film magnetic write head. However, as admitted by the Office Action, Cole does not teach or suggest a non-magnetic layer being made of a material having an etching rate, for ion milling free from using a reactive gas, equal to or higher than that of a material of a first magnetic layer and a second magnetic layer, as recited in Claim 1. The Office Action asserts that Okai teaches such a feature at column 11, lines 56-60.

Applicant submits that column 11, lines 56-60 of Okai does **not** teach or suggest such a feature. Rather, column 11, lines 56-60 teaches using a material comprised of  $\text{Al}_2\text{O}_3$  **and** a **metal oxide** having an oxidation number larger than that of  $\text{Al}_2\text{O}_3$ , such as  $\text{HfO}_2$ ,  $\text{TiO}_2$ ,  $\text{Y}_2\text{O}_3$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{Nb}_2\text{O}_5$ ,  $\text{CeO}_2$ , and  $\text{SiO}_2$ . Okai teaches that  $\text{Al}_2\text{O}_3$  formed by sputtering is etched by solutions used for lapping or rinse when thin film magnetic heads are processed, thus resulting in a pole tip recession. Therefore, Okai teaches adding a metal oxide to the  $\text{Al}_2\text{O}_3$  in order to **reduce** the etch rate. See column 5, line 53 through column 6, line 9, wherein Okai teaches that material comprising  $\text{Al}_2\text{O}_3$  and the metal oxide exhibits a **low** etching rate in order to avoid the generation of a pole tip recession. Therefore, because  $\text{Al}_2\text{O}_3$ , alone, has a considerably lower etch rate than NiFe (see Table 1 on page 10 of the present application), the combination of  $\text{Al}_2\text{O}_3$  and a metal oxide must have an etching rate that is as low or lower than the etching rate of  $\text{Al}_2\text{O}_3$  alone in order to prevent the formation of the pole tip recession. As a result, the etching rate of  $\text{Al}_2\text{O}_3$  and a metal oxide, such as  $\text{Ta}_2\text{O}_5$ , does **not** exhibit an etch rate equal to or higher than that of material of a first magnetic layer and a second magnetic layer, such as NiFe as taught by Okai.

Consequently, Applicant submits that Okai does **not** teach or suggest a non-magnetic layer being made of a material having an etching rate, for ion milling free from using a reactive gas, equal to or higher than that of a material of a first magnetic layer and a second magnetic layer, as recited in Claim 1. Accordingly, Applicant submits that Cole and Okai, either alone or in combination, do not teach or suggest each and every feature recited in Claim 1.

In order to establish *prima facie* obviousness, all claim features must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974) and M.P.E.P. § 2143.03. Because Cole and Okai, either alone or in combination, do not teach or suggest each and every feature recited in Claim 1, Applicant respectfully submits that Claim 1 should be deemed allowable.

Claims 2-4 depend from Claim 1 and, as such, incorporate each and every feature recited therein. Therefore, Applicant submits that Claims 2-4 should be deemed allowable for at least the same reasons Claim 1 is allowable, as well as for the additional subject matter recited respectively therein.

Accordingly, Applicant respectfully requests withdrawal of the rejection.

### **Conclusion**

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 1-4, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 100186-00020.**

Respectfully submitted,  
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